Utah Department of Health

URGENT CLINICIAN/HOSPITAL ALERT
SEVERE ACUTE RESPIRATORY SYNDROME (SARS)

Please share with your colleagues in Critical Care, Emergency Medicine, Family Practice, Internal Medicine, Infectious Diseases, Infection Control, Pediatrics, and Pulmonary Medicine

FROM: Robert Rolfs, MD, State Epidemiologist
DATE: March 17, 2003
RE: Identification of Severe Acute Respiratory Syndrome in Patients with Recent Travel to Asia or their Close Contacts

SUMMARY:

1. **Patients with recent travel (10 days) to Asia who develop fever and acute respiratory disease syndromes should be rapidly isolated in an airborne infection isolation room with airborne and contact precautions.**

2. **All patients who meet the CDC case definitions (see below) should be immediately reported to your Local Health Department or the Utah Department of Health. The 24/7 reporting number for the Utah Department of Health is 1-888-EPI UTAH (374-8824)**

Background:
The World Health Organization (WHO) is actively investigating outbreaks of severe acute respiratory disease in Viet Nam, Hong Kong, and the Guangdong province in China, as well as recent suspect cases from Singapore, Thailand, Indonesia, the Philippines, and Taiwan. In addition, there are now six cases in Toronto, Canada among one family, in which one family member had recently traveled to Hong Kong. There are now more than 150 suspect cases of SARS. This is an illness with significant morbidity and reports of fatalities. It is yet unclear if these outbreaks are related and the disease etiology remains unknown. Initial testing did not find evidence that this disease is due to influenza.

Those at highest risk appear to be family members and health care workers with direct patient contact.

Clinical Presentation:
Early disease presentation includes an initial flu-like illness with high fever followed by myalgias, headache, dry cough, sore throat, and shortness of breath/difficulty breathing. Early laboratory findings may include thrombocytopenia, leukopenia, and elevated transaminases and creatine kinase. Some cases develop hypoxia and interstitial

pneumonia that may progress to acute respiratory distress requiring mechanical ventilation. Incubation period ranges from 1-7 days with a mean of 4 days.

Case Definition:
(a) High fever (>38 degrees Centigrade or 101.4 degrees Fahrenheit) AND
(b) One or more: cough, shortness of breath, difficulty breathing, hypoxia, or radiographic findings of pneumonia or respiratory distress syndrome AND
(c) Either close contact to a case or recent travel to areas reporting cases of SARS within 7 days prior to onset of illness

Isolation Precautions:
1. Place a surgical mask onto suspect patients and escort immediately to an airborne isolation room (negative pressure room).
2. Ensure airborne and contact precaution signage is displayed outside of the room.
3. Ensure all staff and visitors entering the room adhere to both airborne and contact precautions. This includes using disposable gloves and gowns, as well as use of an N-95 or higher respirator. Health care workers should wear eye protection for all patient contact.
4. Ensure that all staff and visitors thoroughly wash their hands upon exiting the room

Laboratory Testing (should include):
Local: Chest radiograph, pulse oximetry, CBC, blood culture, sputum (bacterial) culture, and nasopharyngeal, throat, sputum, or other respiratory specimen for viral pathogens (including influenza A and B, and RSV).
CDC: If a bronchoscopy, transtracheal, and/or lung biopsy are performed, collect both fresh (frozen) tissue and formalinized specimens for testing. Please call (801) 584-8595 24/7 to arrange for submission and transport.

Clinicians should request that the laboratory freeze any remaining clinical specimens (respiratory, blood, and serum) for additional testing until a specific diagnosis is made.

Treatment:
Because the etiology of these illnesses is unknown at this time, there are no specific treatment recommendations available. Empiric therapy should include coverage for organisms associated with community-acquired pneumonia, including agents with activity against both typical and atypical respiratory pathogens. Infectious disease consultation is recommended.

For Further Information:
www.cdc.gov/ncidod/sars or call your Local Health Department or the Utah Office of Epidemiology (801) 538-6191.

As always, the UDOH and LHDs appreciate the ongoing collaboration with the medical and laboratory community in responding to emerging infectious diseases issues in Utah and worldwide.